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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/213,581 12/17/98 LYS

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025181
FOLEY, HOAG & ELIOT, LLP
PATENT GROUP
ONE POST OFFICE SQUARE
BOSTON MA 02109

MM91/1010

EXAMINER

LEE, M

ART UNIT

PAPER NUMBER

2821

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/213,581

Applicant(s)

Lys et al.

Examiner

Wilson Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 16, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 8-26, 41, 42, 45-48, 50-54, and 56-73 is/are pending in the application.
- 4a) Of the above, claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8-26, 41, 42, 45-48, 50-54, and 56-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/17/98 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensor of Claim 46 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 64 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 64, "may" renders uncertainty to the claimed invention as to whether the claimed limitation is required or not.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 2, 8-26, 41, 42, 45-48, 50-54, 56-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phares(5,420,482) cited by applicant in IDS.

Regarding Claims 1, 2, 8-26, 51-54, 56-60, 66-73, Phares briefly discloses a microcontroller(60) as a processor for controlling the amount of electrical current supplied to the illumination display comprised of light elements(48R, 48B, 48G) which generate light of a range of colors(e.g. red, green, blue) to illuminate the object, and a D/A converter that receives the pulse width signal for determining the intensity of the light elements.

As discussed above, Phares essentially discloses the claimed invention but fails to literally or explicitly disclose the light elements as LEDs. However, since Phares does not limit the choices from all kinds of light elements, the implementation of such light element (LEDs) is **not restricted** to his invention. In addition, Phares discloses that those light elements receives digital signals directly from the microprocessor without using any capacitive device or ballast for initiating. Therefore, any skilled in the art would understand or recognize that Phares' light elements represent LEDs in figures 6-8. Since any other light elements, such as incandescent light, halogen lamp, fluorescent lamp, electroluminescent device must require capacitive device or ballast to obtain charging voltage for initiating the illumination. Only LEDs do not need any capacitive device or ballast for starting illumination.

Moreover, it would have been obvious in the knowledge generally available to one of ordinary skill in the art to use LEDs in Phares as light elements in order to attain the following

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advantages: reduced power consumption, simplicity, low cost, lengthen life, etc. Those advantages of LEDs were well published more than 24 years ago. Please see cited prior arts.

Phares, as discussed above, essentially discloses the claimed invention but fails to explicitly disclose the specific usage as claimed such as *illuminating the floor, an aquarium, an informational board, etc.* However, it would have been obvious to one of ordinary skill in the art to use Phares' invention to illuminate any object in order to provide brightness to the observer on the object. Since Phares fails to limit the choice of all kind of usage, the implementation of such specific usage is not restricted. Any other usages should be considered as intended uses.

Regarding Claims 41, 42, 45-48, 50, and 61-65, Phares briefly discloses a lighting system comprising a microprocessor(60) for controlling the light elements(48R, 48B, 48G), a driver(94R, 94B or 94G) as a current sink coupled to the light elements(48R, 48B or 48G) (See Figure 4 of Phares) having an input responsive to an activation signal from the control(40); transmitter(64) as an addressable controller having a Logic Control network(76) for providing alterable address, the controller coupled to the input and having Pulse Generator(80) as a signal generator for generating the activation signal for a predefined portion of a timing cycle(See Col. 3, lines 18-26 of Phares); the addressable controller further comprising an internal shift register means as a receiver or sensor for receiving data corresponding to the alterable address(See Col. 3, lines 57-60 of Phares) and indicative of the predefined portion of the timing cycle(See Figure 1 and Col. 4, lines 4-23 of Phares).

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As discussed above, Phares essentially discloses the claimed invention but fails to literally or explicitly disclose the light elements as LEDs. However, since Phares does not limit the choices from all kinds of light elements, the implementation of such light element (LEDs) is **not restricted** to his invention. In addition, Phares discloses that those light elements receives digital signals directly from the microprocessor without using any capacitive device or ballast for initiating. Therefore, any skilled in the art would understand or recognize that Phares's light elements represent LEDs in figures 6-8. Since any other light elements, such as incandescent light, halogen lamp, fluorescent lamp, electroluminescent device must require capacitive device or ballast to obtain charging voltage for initiating the illumination. Only LEDs do not need any capacitive device or ballast for starting illumination.

Moreover, it would have been obvious in the knowledge generally available to one of ordinary skill in the art to use LEDs in Phares as light elements in order to attain the following advantages: reduced power consumption, simplicity, low cost, lengthen life, etc. Those advantages of LEDs were well published more than 24 years ago. Please see cited prior arts.

Phares, as discussed above, essentially discloses the claimed invention but fails to explicitly disclose the specific usage as claimed such as positioning the system to illuminate a *non-opaque container, vending machine or positioning the system on a piece of clothing or shirt*. However, it would have been obvious to one of ordinary skill in the art to use Phares' invention to illuminate any desired object in order to provide brightness to the observer from the object. Since Phares

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fails to limit the choice of all kind of usages, the implementation of a such specific usage is not restricted. Any other usages should be considered as intended uses.

Response to Arguments.

6. Applicant's arguments filed on July, 16, 2001 have been fully considered but they are not persuasive.

A Well-Known Skill

7. Applicant requests Examiner to provide a reference to support his position.
Examiner already cited a number of references in the previous office action.

Intended Use

8. Applicant argues that Phares does not teach his invention used in vending machine, container, retail display, etc.

Since Phares fails to limit the choice of all kind of usages, using his invention in other location is considered as intended use.

Correspondence

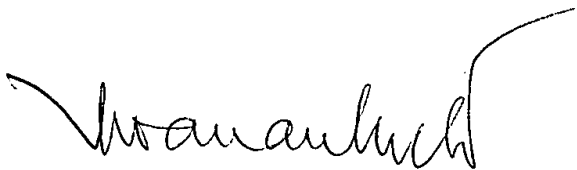
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (703) 306-3426.
10. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.
11. Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response

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must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

A handwritten signature in black ink, appearing to read "Hoanganh Le", with a long, sweeping horizontal line extending to the right.

Hoanganh Le
Primary Examiner

WL

October 9, 2001